

537,792

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 July 2004 (01.07.2004)

PCT

(10) International Publication Number
WO 2004/054656 A1

(51) International Patent Classification⁷: **A61N 1/39**,
A61B 5/053, 5/0428

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/IB2003/005812

(22) International Filing Date: 5 December 2003 (05.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/433,375 13 December 2002 (13.12.2002) US
60/476,981 9 June 2003 (09.06.2003) US

(71) Applicant (*for all designated States except US*): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]**; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **SNYDER, David [US/US]**; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).

(74) Common Representative: **KONINKLIJKE PHILIPS ELECTRONICS N.V.**; c/o **MARION, Michael, E.**, P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (NL).

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

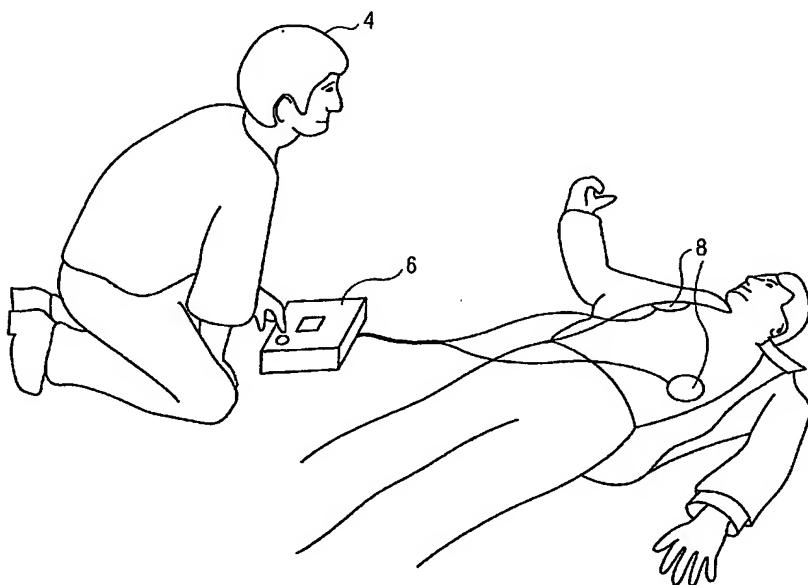
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*

Published:

— *with international search report*

[Continued on next page]

(54) Title: EXTERNAL DEFIBRILLATOR WITH SHOCK ACTIVATED BY CESSATION OF PRECORDIAL COMPRESSIONS



WO 2004/054656 A1

(57) Abstract: A defibrillator having a pair of electrodes for delivering an artifact-compensated defibrillation shock and a method thereof is provided. The defibrillator can be deployed rapidly while administering a cardio-pulmonary resuscitation (CPR) on the patient. Upon detection of an end of the CPR operation, a correlation signal indicative of signal corruption is detected and analyzed rapidly to determine an appropriate energy level discharged across the pair of electrodes. Thereafter, a notification signal is sent to the user of the defibrillator prior to delivering the defibrillation shock to the patient. The artifact-compensated defibrillation shock is delivered if for a predetermined period of time no movements is detected.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.